

NETWORK INTERFACE SUPPORTING VIRTUAL PATHS FOR
QUALITY OF SERVICE

ABSTRACT

[0116] A plurality of virtual paths in a network interface between a host port and a network port are managed according to respective priorities. Thus, multiple levels of quality of service are supported through a single physical network port. Variant processes are applied for handling packets which have been downloaded to a network interface, prior to transmission onto the network. The network interface also includes memory used as a transmit buffer, that stores data packets received from the host computer on the first port, and provides data to the second port for transmission on the network. A control circuit in the network interface manages the memory as a plurality of first-in-first-out FIFO queues having respective priorities. Logic places a packet received from the host processor into one of the plurality of FIFO queues according to a quality of service parameter associated with the packets. Logic transmits the packets in the plurality of FIFO queues according to respective priorities. The transmit packet buffer may be statically or dynamically allocated memory.